

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Please cancel claims 1-43.

The following new claims are submitted:

44. (new) A mixed signal circuit comprising:
- a plurality of distributed programmable I/O units;
 - a plurality of distributed programmable logic units;
 - a plurality of hardwire logic units;
 - a plurality of hardwired RAM files;
 - a plurality of hardwired multilevel storage cell (MLC) arrays; **and**
 - a programming facility for programming the distributed programmable logic units
- wherein software **and** hardware constructs are provided to the other elements of the circuit via **a** host system.
45. (new) The mixed signal circuit of claim 1 wherein the software constructs configure the plurality of distributed programmable logic function.

46. (new) The mixed signal circuit of claim 2 in which the programming facilities comprise programming voltage and current sources, clock and oscillators, state machines and counters within the distributed programmable logic unit.